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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/605,912

11/05/2003

Mark E. Beaulieu

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02/23/2005

SCHMEISER, OLSEN + WATTS

3 LEAR JET LANE

SUITE 201

LATHAM, NY 12110

EXAMINER

PATEL, RAMESH B

ART UNIT

PAPER NUMBER

2121

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/605,912		BEAULIEU ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Ramesh B. Patel		2121	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 12-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-38 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/503 &amp; 3/22/04</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Claims 1-11 are presented for examination. Claims 1-38 are subject to Restriction requirement 35 U.S.C. 121. Applicant has elected claims 1-11 (Group I) with traverse. Claims 12-38 are withdrawn from further consideration due to non-elected claims.

2. The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. The Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

### **Information Disclosure Statement**

3. The information disclosure statements (IDS) submitted on 11/5/2003 and 3/22/2004 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

**Election/Restrictions**

1.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-11, drawn to an apparatus for product carrier to transport product (having particular work transport control between manufacturing stations), classified in class 700, subclass 96.
- II. Claims 12-22 and 31-38, drawn to a method of monitoring an internal environment of a product carrier as performance monitoring (computer generates, monitors, modifies or controls the sequential manufacturing operations using historical data to infer a result), classified in class 700, subclass 104.
- III. Claims 23-30, drawn to a manufacturing system as integrated system (computer integrated manufacturing (CMI)), classified in class 700, subclass 96.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions Group I, Group II and Group III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions Group I is related to an apparatus for product carrier to transport product (having particular work transport control between manufacturing stations) and Group II is related to a method of

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monitoring an internal environment of a product carrier as performance monitoring (computer generates, monitors, modifies or controls the sequential manufacturing operations using historical data to infer a result) while Group III is related to a manufacturing system as integrated system (computer integrated manufacturing (CMI)).

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II and Group III and vice-versa, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Mr. Canale, Anthony J. (Reg. No. 51,526) on 2/16/2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-11. Affirmation of this election must be made by applicant in replying to this Office action. Claims 12-38 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one

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or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

7. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

#### **Claim Objections**

4. Claim 10 is objected to because of the following informalities:

Claim 10, line 4, includes "attributes and events" should be "attributes or events" to be consistent with other clam(s) limitation(s).

Applicant is requested to review all claims and make appropriate correction as required.

#### **Claim Rejections - 35 USC § 112**

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 2-5, 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2, 5 and 7-9, recite the limitations "said attribute or event data". There is insufficient antecedent basis for this limitation in the claim due to the use of these limitations for the first time. Examiner has noticed that claim 1 indicates "an attributes...or an event" but does not particularly "data".

Dependent claims, which are not particularly rejected, are rejected based on the rejected base claim. Applicant is requested to review all claims and make appropriate correction as required.

**Claim Rejections - 35 USC § 102**

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Friedman (US Patent 6,078,845).

As to claim 1, Friedman teaches the invention including an apparatus, comprising: a product carrier adapted to transport product undergoing manufacture as shown in figures 2-3 and 7-9 product or IC carrier is adapted to transport product for various manufacturing environment (see, figures 2-4 and 7-9 and col. 2, lines 21-29), and a first device adapted to sense an attribute or an event data of an environment within said product carrier or an event affecting said product carrier is taught as the information storage device includes a data memory and may be any form of semiconductor component capable of being written to an read from by apparatus located in manufacturing equipment or along manufacturing lines (see, figures 10-11 and col. 2, lines 21-24).

As to claim 2, Friedman teaches the apparatus further comprising: a second device adapted to receive said attribute or event data sensed by said first device and to transmit said attribute or event data is taught as the information storage device includes a data memory and may be any form of semiconductor component capable of being written to an read from by apparatus located in manufacturing equipment or along manufacturing lines (see, figures 10-11 and col. 2, lines 21-24 and col. 5, lines 21-27).

As to claims 3-4, Friedman teaches the apparatus wherein said first and said second device are the same device and wherein said first device is contained within said product carrier or said first device and said second devices are contained within said product carrier (see, abstract and figures 2-4 and 7-9 and col. 5, lines 54-65).



As to claim 5, Friedman teaches the apparatus further including means for sending said attribute or event data to a location external to said product carrier (see, abstract and figures 10-11 and col. 6, lines 9-34).

As to claim 6, Friedman teaches the apparatus wherein said product carrier is adapted to be sealed against the surrounding atmosphere of a manufacturing facility that said product is being manufactured in (see, figures 3-4 and 7-9).

As to claim 7, Friedman teaches the apparatus wherein said second device is programmable with at least a unique product carrier identity and is adapted to transmit said product carrier identity with said attribute or event data (see, abstract and figures 10-11 and col. 6, lines 9-34).

As to claims 8-9, Friedman teaches the apparatus further including additional devices, each additional device adapted to sense one or more additional attributes of the environment within said product carrier or an event affecting said product carrier and a second device adapted to receive said attribute or event data sensed by said first device and by said additional devices and transmit said attribute or event data is taught as the information storage device includes a data memory and may be any form of semiconductor component capable of being written to and read from by apparatus

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located in manufacturing equipment or along manufacturing lines (see, abstract and figures 10-11 and col. 6, lines 9-34).

As to claim 10, Friedman teaches the apparatus wherein said attribute of said environment within said product carrier or an event affecting the product carrier is selected from the group of attributes and events consisting of temperature, pressure, humidity, particulate count, the presence of oxygen, hydrogen, chlorine, elemental gases, ammonia, water vapor, hydrogen fluoride, hydrogen chloride, nitrogen oxides, silanes, alcohols, ketones, esters, amines, solvents, chlorinated solvents and fluoridated solvents, the occurrence of vibration, acceleration and shock, the intrusion of visible light, ultra-violet light, infrared light and microwaves, and electromagnetic events and static electric charge buildup (see, abstract and figures 2-4 and 10-11 and col. 5, lines 4-53).

As to claim 11, Friedman teaches the apparatus wherein a product within said product carrier is selected from the group of products consisting of semiconductor substrates and wafers, photolithography masks, photolithography reticules, semiconductor modules, semiconductor packages, circuit boards, magnetic disks, magnetic hard drive disks, magnetic floppy disks, laser disks, compact disks, digital video disks, optical disks, lenses and mirrors (see, abstract and figures 3-4 and 7-9 and col. 1, line 43 to col. 2, line 6).


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7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramesh B. Patel whose telephone number is 571-272-3688. The examiner can normally be reached on M-Th; 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ramesh B. Patel  
Primary Examiner  
Art Unit 2121 2/18/05

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